

10/28/08

6B

October 27, 2008

The Honorable Patricia M. Mahan  
Mayor, City of Santa Clara  
1500 Warburton Avenue  
Santa Clara, CA 95050

RE: SUPPORT RECYCLING, OPPOSE SINGLE-USE BAG BAN/TAX

Dear Mayor Mahan:

The undersigned organizations -- representing grocery stores, neighborhood markets, restaurants, convenience stores, plastic bag manufacturers, and Californians concerned about new fees and taxes - strongly oppose local ordinances that would ban the use of plastic grocery bags or impose fees and taxes on paper bags.

We believe that any proposal to ban plastic bags and tax paper bags is anti-consumer, anti-environment, and anti-business. As you are keenly aware, today's economic climate is challenging for families and businesses throughout the state and a new and costly mandate on consumers and businesses that use single-use bags will only exacerbate this situation. Instead, we encourage you to work with us to develop and implement a comprehensive plastic bag recycling policy that makes sense for the environment and the economy.

#### AN UNNECESSARY BAN/TAX ON FULLY RECYCLABLE BAGS

Though formal plastic bag recycling programs are relatively new, the amount of material being collected for recycling continues to grow at a rapid pace. Nationally, an estimated 812 million pounds of post-consumer film--including plastic bags--was recovered in 2006 (the last year figures are available, according to the 2006 National Post-Consumer Recycled Plastic Bags and Film Report conducted by Moore Recycling Associates, Inc. of Sonoma, California). This represents a 24% increase from 652 million pounds recovered in 2005. This increase in recycling is expected to at least continue or more likely accelerate, in large part due to the greater prevalence of plastic bag recycling and California's new law, and as more retailers set up bag collection programs. Clearly, now is not the time to revamp the state's existing recycling program at the local level with an onerous and costly new regulatory scheme.

Indications are that more plastic grocery bags and other film-type plastics are being recycled in increasing numbers. In fact, the author of the statewide recycling bill, Assembly member Lloyd Levine, agreed in a recent Op-Ed,

"...that law has already resulted in a substantial increase in both plastic bag recycling and the use of reusable bags, thanks to environmentally conscious consumers."

[<http://www.mydesert.com/apps/pbcs.dll/article?AID=/20080806/OPINION02/808060301/1026/news12>]

Why would the City of Santa Clara consider abandoning this new program and saddling consumers with a higher cost proposal that does nothing to advance the recycling of these products?

Proponents argue the proposed ordinance is an incentive for consumers to bring a reusable bag to grocery stores. While this option is surely suitable for some, it is not a practical option for many, especially for those who rely solely on public transportation or are part of the 92% of the population who re-use their bags for

needs such as pet waste, lunches, trash can liners, etc. instead of buying new plastic bags for these uses. In fact, the staff report states that Ireland imposed a fee that reduced plastic grocery bag consumption by 90%, but it doesn't say that studies found the use of other plastic bags shot up by more than 400% because of the demand for reuse. Furthermore, consumers who accidentally forget to bring a reusable bag would be left with no choice but to pay an exorbitant tax on paper bags.

While staff during the Santa Clara County Recycling and Waste Reduction Commission meetings has made it abundantly clear that they favor this detrimental ban/tax policy and oppose the recycling-based policy option most desired by many in the business community, we would like to continue expressing our desire to meet and explore these opportunities further, especially in an inclusive stakeholder process that is open to policies **other than** a ban/tax.

## ADDRESSING INCORRECT INFORMATION ABOUT PLASTIC BAGS

The proposed Commission model ordinance will not just switch consumer preference to reusable bags, as many people will continue to demand a single-use bag. We are concerned that much of the information provided by their staff as justification for this local ordinance is incorrect. The information below was taken from third-party literature and will help set the record straight.

### Facts:

- ✓ Eighty-five percent of plastic bags manufactured in the United States are **NOT PRODUCED FROM OIL**. They are produced primarily from ethane, a byproduct of natural gas and therefore do not add to our dependence on foreign oil or contribute to high gas prices.
- ✓ The City of San Francisco conducted the *Streets Litter Audit* before and after their ban of plastic bags. The empirical data clearly show that the ban had **NO IMPACT** on the city's litter reduction goals. The key findings, attached, were:
  - 51% of the litter composition was fiber-based materials.
  - Total bag litter increased from 4.4% before the ban to 5.9% after.
  - Plastic retail bag litter was .6% before and after the ban. The data clearly shows that a plastic bag ban did not reduce the amount of litter.
- ✓ **City of Seattle staff report:** In a recent report, staff "examined the life cycle environmental impact of disposable shopping bags and found that the impact of paper bags was overall four times worse than that for an equal number of plastic bags...Banning plastic bags would push stores and shoppers to paper bags, resulting in significantly greater greenhouse gas generation."
- ✓ **Oakland lawsuit:** When several plastic bag manufacturers (not affiliated with any of our coalition members) filed a lawsuit alleging that the City of Oakland did not complete an Environmental Impact Report as required under the California Environmental Quality Act, the judge ruled in favor of the manufacturers and said, "The court...finds that substantial evidence in the record supports at least a fair argument that single-use paper bags are more damaging than single-use plastic bags."
- ✓ **Environment Protection Agency:** Plastic bags generate only 50% of the greenhouse gases, 80% less waste, need only 6% of the water during production, generate 91% less energy to recycle, and need only 70% less energy to produce than paper bags. [references attached]
- ✓ **Litter and Waste Stream Amounts:** The EPA found that plastic retail bags are only .5% of the waste stream, and San Francisco found that they are only .6% of their total litter.

- ✓ **Boustead Lifecycle Assessment:** This third-party report found that compared to paper and compostable bags, plastic bags have lower amounts of total energy, fossil fuel, municipal solid waste, greenhouse gases, and fresh water usage. [attached]

While staff believes the proposed ordinance will compel consumers to switch to reusable bags, it cannot go unnoticed that this policy will also result in many consumers using paper bags, resulting in significant environmental impacts.

For the above listed reasons, we strongly oppose this proposed model ordinance. We believe that the most prudent, economic, and environmentally beneficial approach is to focus existing resources on expanding upon the state's current recycling law and exploring other such programs.

Sincerely,

Auday Arabo  
President  
Neighborhood Market Association

Amalia Chamorro  
Director, Local Government Affairs  
California Restaurant Association

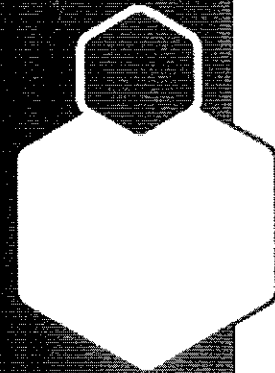
Ted Costa  
Chief Executive Officer  
People's Advocate, Inc.

John Handley  
Government Relations Director  
California Independent Grocers Association

Keith Jones  
Senior Director, Government Affairs  
7-Eleven Convenience Stores

Ryan Kenny  
Manager, State Affairs and Grassroots  
Progressive Bag Affiliates of the American Chemistry

CC: Council member Dominic Caserta  
Council member Will Kennedy  
Council member Pat Kolstad  
Council member Joe Kornder  
Council member Jamie McLeod  
Council member Kevin Moore



# Boustead Lifecycle Assessment: Results

	Impact Summary of Various Bag Types		
	(Carrying Capacity Equivalent to 1000 Paper Bags)		
	Paper (30% Recycled Fiber)	Compostable Plastic	Polyethylene
Total Energy Usage (MJ)	2622	2070	763
Fossil Fuel Use (kg)	23.2	41.5	14.9
Municipal Solid Waste (kg)	33.9	19.2	7.0
Greenhouse Gas Emissions (CO2 Equiv. Tons)	0.08	0.18	0.04
Fresh Water Usage (Gal)	1004	1017	58



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# The City of San Francisco STREETS LITTER RE-AUDIT 2008

PREPARED FOR

The City of San Francisco  
San Francisco Environment Department

PREPARED BY



Brown, Vence  
& Associates, Inc.

&



July 4, 2008

## Executive Summary

The City of San Francisco continues to be known throughout North America for its initiatives to protect the environment. The City has a multitude of waste reduction and waste management programs in place to improve the environment for residents. Such activities as recently moving to "all-plastics" pick ups in the curbside recycling program are examples of how this city achieved a 70% diversion rate by 2007.

In 2007, the City conducted a litter audit. Working with HDR / BVA Engineering, a local San Francisco full service firm, the City audited litter on city streets. HDR / BVA in turn contracted MGM Management, a Canadian environmental consulting firm that has expertise in the area of litter audit work to design the audit to conform with their proven methodology. MGM Management has conducted over a fourteen major litter audits to major North American municipalities since 2002, and has an accumulated data base of over 56,000 litter observations.

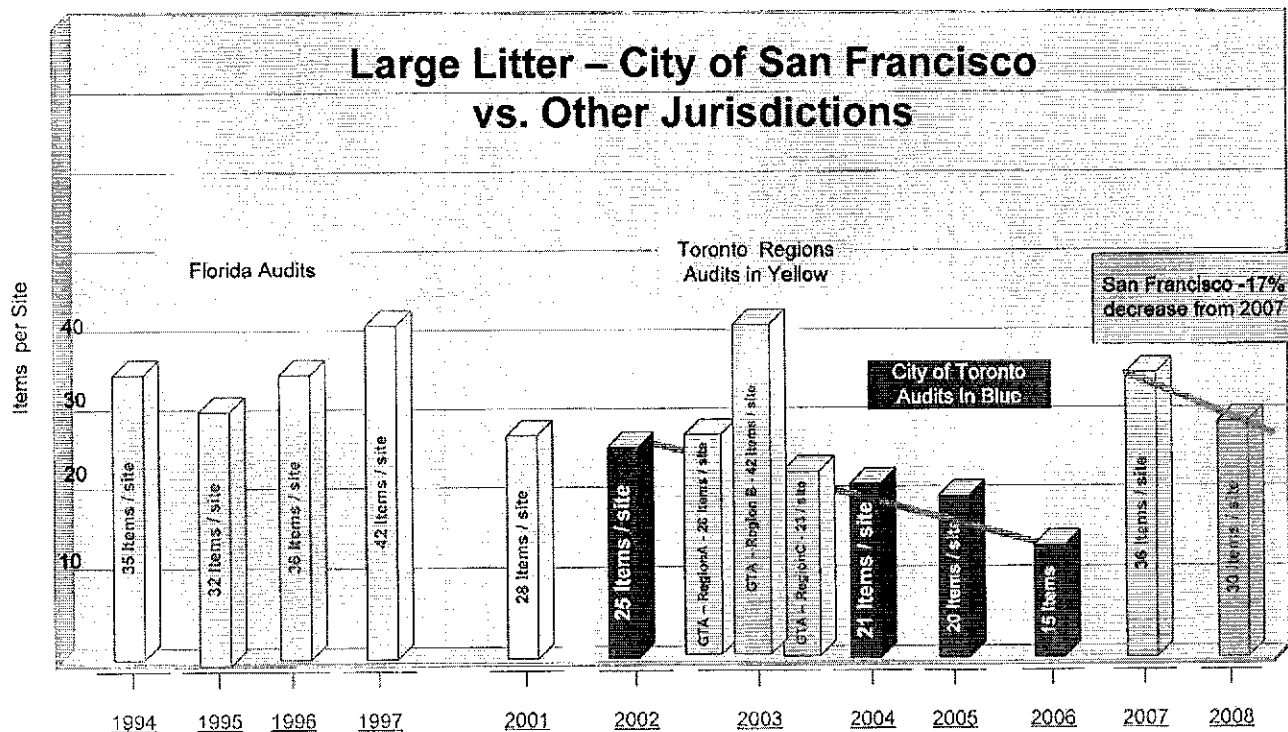
The San Francisco Department of Environment decided that it was necessary to re-audit the 2007 sites in 2008, and to add additional sites to strengthen the litter observations. HDR / BVA Engineering managed and provided trained auditors for the work, while MGM Management provided the audit design, methodology protocols, site selection including new randomly selected sites, data management and data analysis services.

Within this study litter is classified as "large" for those items over 4 square inches in size or as "small" litter for items less than 4 sq. in. Eighty-four sub-categories of large and sixteen sub-categories for small litter were examined.

A total of 3,973 items of large litter were observed by auditors, on San Francisco streets during the April 2008 litter audit.

One hundred and thirty two sites (increased from 105 in 2007) were audited April 7 - 18, 2008. This audit was conducted at approximately the same time of year in 2008 as in the previous audit (conducted April 9 - 20, 2007).

The 2007 audit observed, an average of 36 items of large litter per site; which decreased 17% to 30 items of large litter per site in 2008 ( 3,973 / 132 sites). The chart below illustrates how the results in the San Francisco litter audit compare with 2007 and with other jurisdictions.



The largest category of large litter observed, at 664 litter pieces was non-branded paper napkins and paper towels. This is a similar result from the 2007 audit, where napkins were the second most significant category (570 pieces of large litter in 2007). Printed paper materials were the second most significant litter category at 380 items, followed closely by miscellaneous paper, last year's most significant large litter category. Miscellaneous paper was the third most significant category in the 2008 litter audit with 318 items observed.

Again in 2008, all fiber based products and items that were observed contributed 51% of the total large litter observed, as compared to 54% in the 2007 audit. Fiber based litter included paper, paperboard, cardboard, towels, napkins, newspapers, books, flyers, printed materials, and business forms, stationary.

Focus on plastic is misplaced

An interesting observation was made in terms of what brands of printed materials are on the ground in San Francisco. MUNI tickets and transfers are a contributor to paper litter on city streets. This observation of transit ticket, receipts and transfers as being a significant contribution to paper litter is consistent with observations made by the consultant in our (other) urban audits. This is an area where action can reduce litter significantly.

The second most significant material type observed was plastic materials. These included miscellaneous plastic, plastic packaging, wrap, plastic bags-retail and non-retail, hot and cold plastic drink cups, plastic jars, bottles, composites, utensils, zip bags, beverage containers, trays, polystyrene cups, confectionary, sweet and snack food packaging, pouches, plates, retail bags, and carrying rings. The most significant single category of plastic litter was unidentified miscellaneous plastic litter; which is litter that is broken or weathered that auditors cannot identify it with certainty; and is assumed to be plastic. Miscellaneous plastic litter accounted for 186 littered items or 4.7 % (compared to 9% in 2007) of total litter. All large plastic litter in aggregate accounted for 953 items observed (compared to 746 in 2007), or 24 % of total large litter observed (compared to 20% in 2007).

Below we compare litter occurrence in San Francisco versus all previous audits completed by the consultant. This allows a comparison to other jurisdictions where litter audits have been done using the same methodology.

### San Francisco 2008 vs. Other Jurisdictions (2002 - 2007)<sup>1</sup>

	Observations - 2002 to 2006 (other jurisdictions)	% of total Large Litter - 2002 to 2006 (other jurisdictions)	San Francisco Litter Audit (April 2007)	% of total Large Litter - SF April 2007	% of total Large Litter - SF April 2008
Other Miscellaneous	15,428	33.2%	1,316	34.5%	23.6%
Printed & Fiber Mat'l	8,693	18.7%	1,016	26.7%	31.3%
Confectionary	4,094	8.8%	326	8.6%	7.6%
Cups	3,366	7.2%	243	6.4%	6.4%
Bags	1,232	2.7%	169	4.4%	5.9%
Other Packaging	2,862	6.2%	145	3.8%	3.3%
Beverage Containers	3,420	7.4%	135	3.5%	3.0%
Take-Out Extras	1,076	2.3%	116	3.0%	3.8%
Tobacco Products	2,594	5.6%	110	2.9%	3.7%
Wraps	1,109	2.4%	68	1.8%	3.6%
Textiles	608	1.3%	62	1.6%	1.0%
Other Containers	1,472	3.2%	55	1.4%	2.2%
Boxes	448	1.0%	45	1.2%	3.4%
Trays	88	0.2%	6	0.2%	0.1%
	46,490	100%	3,812	100%	100%

Total bag litter is a small portion of total (5.9% of large items, 3.7% of small)

Bag litter has increased after plastic bag ban

1. Aggregated litter data, Litter audits by MGM Management including:

City of Toronto, Canada (2002, 2003, 2004 (2 audits), 2005, 2006

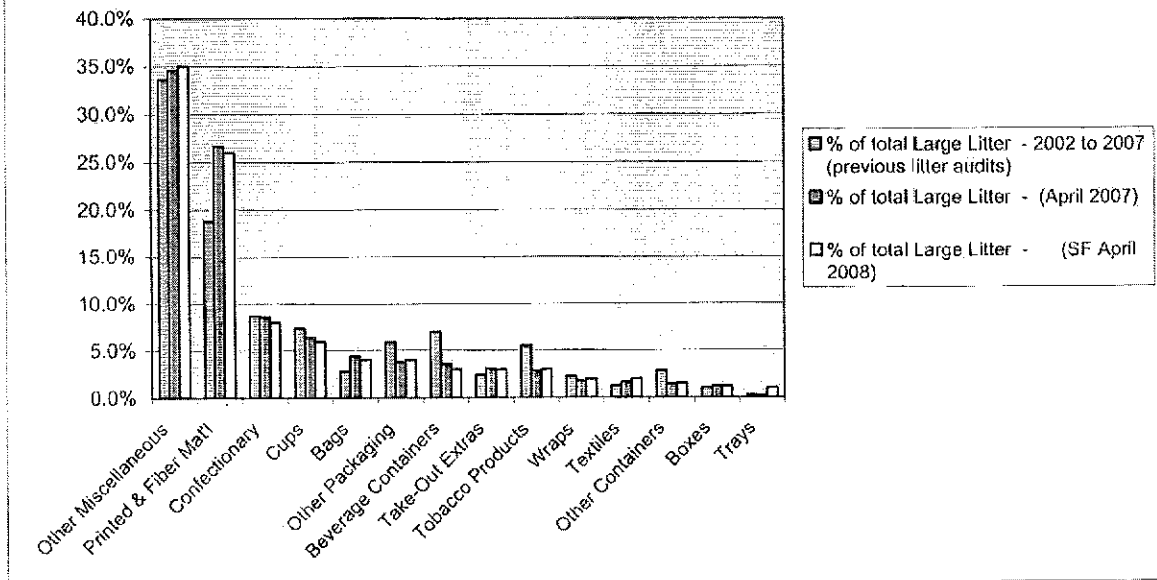
Regional Municipality of Peel, Canada (2003)

Regional Municipality of York, Canada (2003)

Regional Municipality of Durham, Canada (2003)



## San Francisco - Compared to 2007 & All Audits



Again in 2008, observations of the small litter classification during the San Francisco audit showed a relatively low occurrence of small litter on city streets, as compared to audits performed by the consultant in other cities. In the 2008 audit, 2,335 small litter items were observed (compared to 2,393 in 2007) at 132 sites audited. This averages 18 items per site (compared to 23 in 2007) which is comparable with 21 items / site for the City of Toronto, Ontario, Canada; where considerable clean-up activities and litter abatement efforts have been underway for several years. Averages twice as high as the small litter rate observe in San Francisco in 2007 have been recorded by the consultant in other litter audits.

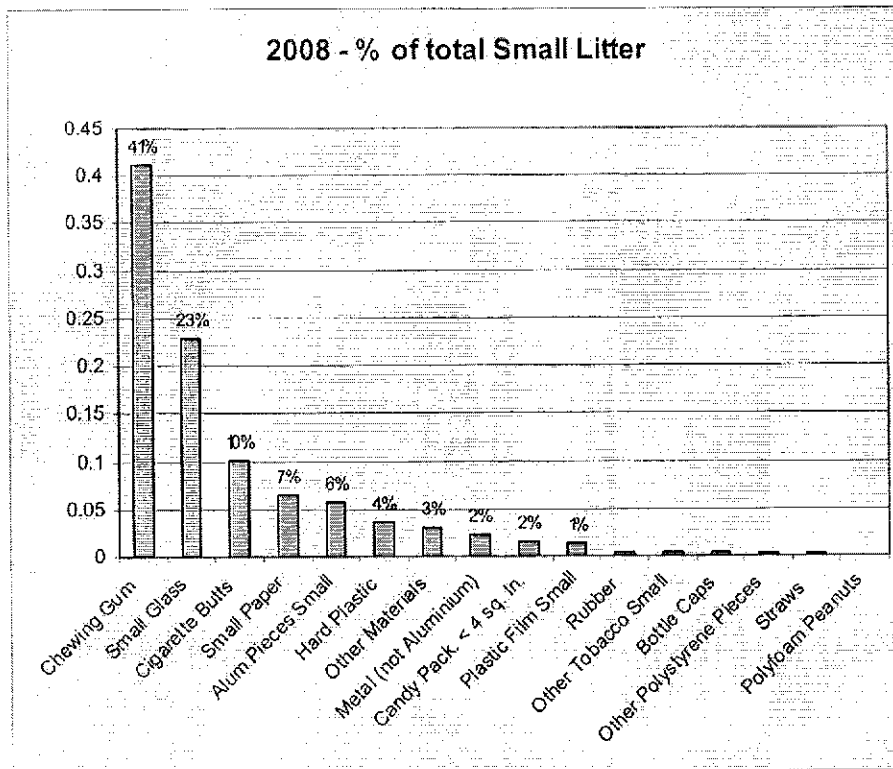
As identified in the 2007 litter audit, gum deposits on San Francisco streets continue to be a significant issue. Gum deposits on sidewalks and roadways cause a sticky and annoying problem for pedestrians. Gum deposits accounted for 39.5% of all the small litter observed during the 2007 audit, and in 2008 a similar observations was noted. In the 2008 litter audit gum deposits were 41% of the small litter observations made (960 gum deposits noted). Glass and paper small litter were also significant contributors to this class of litter.

Small litter is difficult to control, in that it is "manufactured" by a combination of degradation (weather) and man-made activities (vehicle traffic, mowing, etc.).

The small litter results for the 2008 San Francisco audit sites are illustrated below.

Due to the nature of randomly selecting sites and the methodology used for litter auditing of those locations, the consultant is of the opinion that this litter audit is representative of the overall litter occurrence in the City of San Francisco streets, as of April 2008.

## 2007 San Francisco - Small Litter – by Category



## Small Litter Summary

Category	Description	SF 2008	SF 2008	SF 2007	SF 2007
		Total Small Litter Items Observed	% of Total Small Litter	Total Small Litter Items Observed	% of Total Small Litter
16	Chewing Gum	960	41.1%	946	39.5%
8	Small Glass	635	22.9%	710	29.7%
9	Small Paper	153	6.6%	187	7.8%
1	Cigarette Butts	234	10.0%	135	5.6%
15	Other Materials	73	3.1%	97	4.1%
11	Hard Plastic	85	3.6%	92	3.8%
10	Plastic Film Small	33	1.4%	56	2.3%
2	Other Tobacco Small	9	0.4%	51	2.1%
14	Metal (not Aluminium)	52	2.2%	41	1.7%
13	Rubber	10	0.4%	26	1.1%
12	Alum Pieces Small	135	5.8%	19	0.8%
5	Candy Pack < 4 sq. in.	36	1.5%	16	0.7%
6	Polyfoam Peanuts	2	0.1%	8	0.3%
7	Other Polystyrene Pieces	6	0.3%	5	0.2%
3	Bottle Caps	8	0.3%	4	0.2%
4	Straws	4	0.2%	0	0.0%
		2,335	100.0%	2,393	100.0%

Average SF Small Litter Items / site 18

23

### 3.2.3 Bags

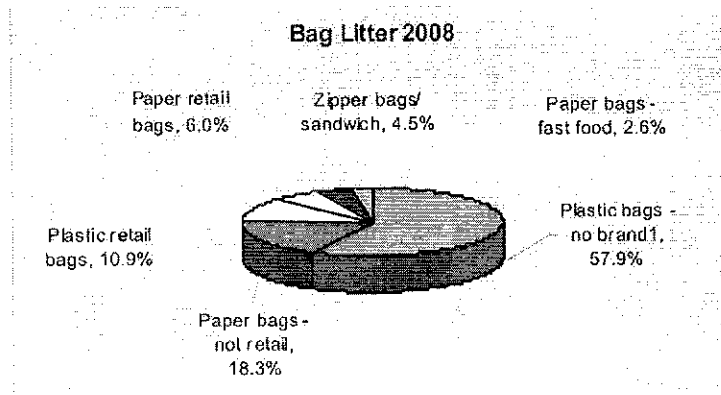
#### 3.2.3 Bags

	Items	% of Sub-category	2008 % of Total Large Litter	2007 % of Total Large Litter
Plastic bags - no brand <sup>1</sup>	136	57.9%	3.42%	1.11%
Paper bags - not retail	43	18.3%	1.08%	1.88%
Plastic retail bags	25.5	10.9%	0.64%	0.60%
Paper retail bags	14	6.0%	0.35%	0.37%
Zipper bags/ sandwich	10.5	4.5%	0.26%	0.31%
Paper bags - fast food	6	2.6%	0.15%	0.18%
	235	100.0%	5.91%	4.45%

Plastic bag ban has done nothing to reduce bag litter.  
Plastic retail bags were 0.6% before and after plastic bag ban

Sub-category average (2002 - 2007 - 54,000 observations) 2.80%

1. Note: Plastic bags with no clear brand marking included in this sub-category
2. Item counts may not equal whole numbers due to averaging.



#### Discussion:

Plastic bags including retail sacks, zipper bags represented 4.3 % of total large litter (172 items out of 3,973). Plastic bags represented 73% of bag litter, as observed in the 2008 litter audit. Plastic bags with or without brand marking on them (i.e. grocery bags) represented 69% of the litter in this category, and 4% of total litter. Paper bags collectively accounted for 24 % of this sub-category, with non-retail paper bags (like lunch bags) representing 18% of the sub-category.

In 2008, as was also observed in 2007, bag litter in San Francisco was higher (5.9% of total litter) than the consultant's category average for bags in all audits conducted between 2002 - 2007 (2.8%) from other combined jurisdictions.



## Info Sheet

Contact: Jennifer Killinger (703) 741-5833  
Email: [jennifer\\_killinger@americanchemistry.com](mailto:jennifer_killinger@americanchemistry.com)

### RECYCLABLE PLASTIC BAGS

**Plastic grocery bags are an extremely resource-efficient disposable bag choice.**

- Plastic grocery bags require 70 percent less energy to manufacture than paper bags.<sup>1</sup>
- For every seven trucks needed to deliver paper bags, only one truck is needed for the same number of plastic bags, helping to save energy and reduce emissions.
- It takes 91% less energy to recycle a pound of plastic than it takes to recycle a pound of paper.<sup>2</sup>

**Less material means less waste and fewer emissions.**

- 2,000 plastic bags weigh 30 lbs; 2,000 paper bags weigh 280 lbs. Plastic bags take up a lot less space in a landfill.<sup>2</sup>
- Plastic bags generate 80 percent less waste than paper bags.<sup>2</sup>
- Plastic grocery and retail bags make up a tiny fraction (less than 0.5 percent) of the U.S. municipal solid waste stream.<sup>3</sup>
- Plastic bags generate only 50% of the greenhouse gas (GHG) emissions of composted paper bags.<sup>1</sup>
- The production of plastic bags consumes less than 6 percent of the water needed to make paper bags.<sup>1</sup>

**Plastic grocery bags are fully recyclable<sup>4</sup> and the number of recycling programs is increasing daily.**

- Nationwide over 812 million pounds of bags and film were recycled in 2006 – up 24 percent from 2005.<sup>5</sup>
- According to EPA's data, about 10 percent of plastic bags and film were recycled in 2006.<sup>3</sup>
- Plastic bags can be made into dozens of useful new products, such as building and construction products, low-maintenance fencing and decking, and of course, new bags.
- There is high demand for this material, and in most areas, demand exceeds the available supply because many consumers are not aware that collection programs are available at local stores.
- In recent years, many grocers and retailers have introduced plastic bag collection programs. Consumers should look for a collection bin, usually located at the front of the store. The number of municipal drop-off centers and curbside programs to recycle plastic bags is increasing also. Consumers can locate plastic bag recycling programs in their communities by visiting [www.PlasticBagRecycling.org](http://www.PlasticBagRecycling.org).
- In addition to grocery bags, other plastic retail bags, dry cleaning bags, newspaper bags, plastic wrap from products like paper towels and toilet paper, and all bags labeled with recycling codes #2 (HDPE) and #4 (LLDPE) can be included wherever plastic bags are collected for recycling.

<sup>1</sup> Boustead Consulting & Associates Ltd. *Life Cycle Assessment for Three Types of Grocery Bags -- Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper*. 2007. See: <http://www.americanchemistry.com/plastics/doc.asp?CID=1106&DID=7212>

<sup>2</sup> U.S. Environmental Protection Agency. *Questions about Your Community Shopping Bags: Paper or Plastic*. See: <http://web.archive.org/web/20060126235734/http://www.epa.gov/region1/communities/shopbags.html>

<sup>3</sup> U.S. Environmental Protection Agency. *Municipal Waste in the United States: 2006 Facts and Figures*. See: <http://www.epa.gov/epaoswer/non-hw/municipl/msw99.html>

<sup>4</sup> Recycling may not be available in all areas. Check to see if plastic bag recycling exists in your community. See: [http://www.plasticbagrecycling.org/01\\_0/](http://www.plasticbagrecycling.org/01_0/)

<sup>5</sup> Moore Recycling Associates, Inc. *2006 National Post-Consumer Recycled Plastic Bag and Film Report*. Sonoma, California. 2008. See: <http://www.americanchemistry.com/plastics/doc.asp?CID=1593&DID=7140>



**In addition to recycling, a recent national survey shows that over 90% of Americans reuse their plastic bags.**

- About 65% of Americans reuse their bags for trash disposal. Other common uses include lunch bags and pet pick-up.
- In this regard, the reuse of a plastic shopping bag prevents a second bag from being purchased to fulfill these necessary functions.

## **WHAT TO KNOW ABOUT BAG BANS**

**Banning recyclable plastic bags will not reduce society's dependence on oil.**

- In the United States, nearly 80% of polyethylene<sup>6</sup>, the type of plastic used to make plastic bags, is produced from natural gas, *not* oil. This includes feedstock, process and transportation energy.
- Much of the energy used to make plastic bags is embodied in the bag itself, and since plastic bags are fully recyclable, that energy is available for new products.

**Mandating that recyclable plastic bags be replaced with biodegradable or compostable bags will not reduce litter or the amount of waste in our landfills.**

- The biodegradable and compostable bags currently on the market will only degrade in a professionally-managed, large-scale composting facility. They will not breakdown in the natural environment, in a home composting device or in a landfill.
- It is currently estimated that there are fewer than 100 suitable composting facilities in the United States. Where composting facilities are not available, "compostable" bags will be sent to a landfill.

**Banning recyclable plastic bags or mandating their replacement with compostable bags will diminish efforts to recycle these products.**

- Mandating that grocers and retailers replace plastic bags with compostable or paper bags will eliminate many in-store collection programs, which are currently the largest mechanism for recovering post-consumer bags for recycling.
- In addition, the mandated use of compostable bags will cause the accidental commingling of biodegradable and recyclable bags, which will contaminate the recovered material, rendering it unusable by manufacturers.

**Last Updated: August 13, 2008**

# # #

<http://www.americanchemistry.com>

*The American Chemistry Council (ACC) represents the leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to make innovative products and services that make people's lives better, healthier and safer. ACC is committed to improved environmental, health and safety performance through Responsible Care®, common sense advocacy designed to address major public policy issues, and health and environmental research and product testing. The business of chemistry is a \$664 billion enterprise and a key element of the nation's economy. It is one of the nation's largest exporters, accounting for ten cents out of every dollar in U.S. exports. Chemistry companies are among the largest investors in research and development. Safety and security have always been primary concerns of ACC members, and they have intensified their efforts, working closely with government agencies to improve security and to defend against any threat to the nation's critical infrastructure.*

<sup>6</sup> U.S. Department of Energy's and National Renewable Energy Laboratory's U.S. Life Cycle Inventory Database. See: <http://www.nrel.gov/lci/>  
Data also available as a report: Franklin Associates, LLC. *Cradle-to-Gate Life Cycle Inventory of Nine Plastic Resins and Two Polyurethane Precursors*. 2007. See: [http://www.americanchemistry.com/s\\_plastics/sec\\_content.asp?CID=1930&DID=7832](http://www.americanchemistry.com/s_plastics/sec_content.asp?CID=1930&DID=7832)

